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# *Indian Standard*

“पुनर्पुष्ट १९९५”
“RE-AFFIRMED 1995”

# SPECIFICATION FOR BEATEN RICE

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NEW DELHI 110002

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# *Indian Standard*

# SPECIFICATION FOR BEATEN RICE

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# *Indian Standard*

# SPECIFICATION FOR BEATEN RICE

## 0. FOREWORD

**0.1** This Indian Standard was adopted by the Indian Standards Institution on 31 January 1984, after the draft finalized by the Foodgrains and Foodgrain Industries Sectional Committee had been approved by the Agricultural and Food Products Division Council.

**0.2** Beaten rice, also known as *CHEWDA*, is commonly consumed as a snack food after frying and adding salt and spices for taste. It is also consumed with milk and sugar.

**0.3** Beaten rice is produced from paddy by a process of soaking in hot water drying hand-roasting and then flaking followed by sieving and dehusking. There is an increasing demand for beaten rice in India particularly in eastern region. It is expected that the formulation of the standard on this product would facilitate the availability of beaten rice of known quality.

**0.4** In preparation of this standard considerable assistance has been derived from ASC Specification.

**0.5** In the formulation of this standard due consideration has been given to the *Prevention of Food Adulteration Act, 1954*, and Rules framed thereunder. Due consideration has also been given to the *Standards of Weights and Measures ( Packaged Commodities ) Rules, 1977*. However, this standard is subject to restrictions imposed under these rules, wherever applicable.

**0.2** For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS : 2-1960*. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

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*Rules for rounding off numerical values ( *revised* ).

## 1. SCOPE

**1.1** This standard prescribes the requirements and the methods of sampling and test for beaten rice.

## 2. REQUIREMENTS

**2.1 General** — The beaten rice shall be prepared only from sound good quality paddy. The beaten rice shall be white, unstained, sound, sweet, wholesome, free from live infestation, moulds and fungi. It shall be free from paddy, paddy husks, any extraneous matter like dirt, stones, rat and insect dropping and non-foodgrains. Foreign foodgrains to the extent of 0·5 percent may be permitted. Before packing it shall be carefully sieved to remove all fine powder.

**2.2 Grade** — Beaten rice shall be of three grades depending upon the thickness of the flakes:

| *Grade* | *Thickness of the Flakes* |
|---|---|
| i) Fine | 0·5 mm |
| ii) Medium | 0·8 mm |
| iii) Coarse | 1·2 mm |

**2.3 Reconstitution** — The beaten rice shall be of such quality as shall constitute in water at 30°C when reconstituted as specified in **2.3.1**, **2.3.2** and **2.3.3**. The reconstituted beaten rice shall not be pasty and shall be discrete in shape.

**2.3.1** Fine grade flakes shall reconstitute in about 5 minutes at 30°C in the proportion of 100 parts of beaten rice to 400 parts of water.

**2.3.2** Medium grade flakes shall reconstitute in about 15 minutes at 30°C in the proportion of 100 parts of beaten rice to 315 parts of water.

**2.3.3** Coarse grade flakes shall reconstitute in about 20 minutes in the proportion of 100 parts of beaten rice to 300 parts of water.

**2.4 Taste and Flavour** — It shall have wholesome and pleasant taste, and flavour. It shall not be musty and shall be free from any unpleasant, objectionable taste and flavour.

**2.5** Beaten rice shall also conform to the requirements given in Table 1.

## 3. PACKING AND MARKING

**3.1 Packaging** — The packages may be of 250 g, 500 g, 1 kg, 2 kg, 10 kg, 20 kg, 30 kg, 35 kg, 40 kg, 45 kg as desired by the purchaser.

### TABLE 1 REQUIREMENTS FOR BEATEN RICE

( *Clause* 2.5 )

| Sl No. | Characteristic | Requirement | Method of Test, Ref to |
|---|---|---|---|
| (1) | (2) | (3) | (4) |
| i) | Moisture content, percent by mass, *Max* | 13 | Appendix A of IS : 1158-1973* |
| ii) | Acid insoluble ash, percent by mass, *Max* | 0·3 | Appendix C of IS : 1158-1973* |

*Specification for corn flakes ( *first revision* ).

**3.1.1** Unless otherwise agreed to between the purchaser and the vendor, quantities above 65 kg, shall be packed in single, sound A-twill or B-twill jute bags ( *see* IS : 1943-1964* and IS : 2566-1965† ).

**3.1.2** For quantities less than 65 kg ( *see* **3.1** ), the material shall be packed in polyethylene or polyethylene lined jute bags or in bags of any other suitable material as agreed to between the purchaser and the vendor.

**3.1.3** The mouth of each bag shall be either machine-stitched or hand stitched. If it is hand-stitched, the mouth shall be rolled over and then stitched. The stitches shall be in two cross-rows with at least 14 stitches in each row for jute bags of 65 kg and above.

**3.2 Marking** — Each bag shall bear legibly the following in addition, to the information as is necessary under the *Standards of Weights and Measures ( Packaged Commodities ) Rules, 1977*:

a) Name of the material;

b) Name and address of the manufacturer;

c) Batch or code number; and

d) Net mass.

**3.2.1** The marking of the bags shall be done in such a manner that the dye or ink ( *see* IS : 1234-1980‡ ) used does not penetrate into the material.

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*Specification for A-twill jute bags ( *revised* ).
†Specification for B-twill jute bags ( *revised* ).
‡Specification for ink stencil oil base, for marking porous surfaces ( *first revision* ).

**3.2.2** Each bag may also be marked with the ISI Certification Mark.

NOTE — The use of the ISI Certification Mark is governed by the provisions of the Indian Standards Institution ( Certification Marks ) Act and the Rules and Regulations made thereunder. The ISI Mark on products covered by an Indian Standard conveys the assurance that they have been produced to comply with the requirements of that standard under a well-defined system of inspection, testing and quality control which is devised and supervised by ISI and operated by the producer. ISI marked products are also continuously checked by ISI for conformity to that standard as a further safeguard. Details of conditions, under which a licence for the use of the ISI Certification Mark may be granted to manufacturers or processors, may be obtained from the Indian Standards Institution.

## 4. SAMPLING

**4.1** Representative samples of material for testing conformity to this standard shall be drawn according to the method prescribed in Appendix F of IS : 1158-1973*.

## 5. TESTS

**5.1** Tests shall be carried out as prescribed under **2.1**, **2.3**, **2.4**, **2.5** and the appropriate appendices specified in col 4 of Table 1.

**5.2 Quality of Reagent** — Unless specified otherwise, pure chemicals and distilled water ( *see* IS : 1070-1977† ) shall be employed in tests.

NOTE — ' Pure chemicals ' shall mean chemicals that do not contain impurities which affect the results of tests or analysis.

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*Specification for cornflakes ( *first revision* ).

†Specification for water for general laboratory use ( *second revision* ).

( *Continued from page* 2 )

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# INTERNATIONAL SYSTEM OF UNITS ( SI UNITS )

## Base Units

| QUANTITY | UNIT | SYMBOL |
|---|---|---|
| Length | metre | m |
| Mass | kilogram | kg |
| Time | second | s |
| Electric current | ampere | A |
| Thermodynamic temperature | kelvin | K |
| Luminous intensity | candela | cd |
| Amount of substance | mole | mol |

## Supplementary Units

| QUANTITY | UNIT | SYMBOL |
|---|---|---|
| Plane angle | radian | rad |
| Solid angle | steradian | sr |

## Derived Units

| QUANTITY | UNIT | SYMBOL | DEFINITION |
|---|---|---|---|
| Force | newton | N | 1 N = 1 kg.m/s$^2$ |
| Energy | joule | J | 1 J = 1 N.m |
| Power | watt | W | 1 W = 1 J/s |
| Flux | weber | Wb | 1 Wb = 1 V.s |
| Flux density | tesla | T | 1 T = 1 Wb/m$^2$ |
| Frequency | hertz | Hz | 1 Hz = 1 c/s (s$^{-1}$) |
| Electric conductance | siemen | S | 1 S = 1 A/V |
| Electromotive force | volt | V | 1 V = 1 W/A |
| Pressure, stress | pascal | Pa | 1 Pa = 1 N/m$^2$ |